

(February 17, 1926)

PUBLICATIONS RELATING TO ELECTRIC BATTERIES.

The Bureau of Standards has issued the following publications on battery subjects. These may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C., at the prices indicated. In the tabulation given below the initial letter preceding each number shows the publication series in which it was issued: S for Scientific Papers, T for Technologic Papers, and C for Circulars. Papers marked "Out of Print" are no longer available but may be consulted at the Government depository libraries, several of which have been designated by Congress in each state.

| <u>Designation</u> | <u>(a) Dry Cells</u> | <u>Date of Issue</u> | <u>Price (cents)</u> |
|--------------------|---|----------------------|----------------------|
| C 79 | Electrical characteristics and testing of dry cells (2nd ed.) | Jan. 19, 1923 | 15 |
| S 364 | Relation of voltage of dry cells to the hydrogen-ion concentration. | Feb. 24, 1920 | 5 |
| T 171 | Automatic apparatus for intermittent testing | July 22, 1920 | 5 |
| S 434 | Electromotive force of cells at low temperatures | April 17, 1922 | 5 |
| C 139 | U.S. Government specifications for dry cells | June 15, 1923 | 5 |

(b) Storage Batteries

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|-------|---|---------------|--------------|
| T 146 | Cadmium electrode for storage battery testing | Dec. 12, 1919 | 5 |
| T 149 | Estimation of nitrates and nitrites in battery acid | Feb. 24, 1920 | 5 |
| C 92 | Operation and care of vehicle-type batteries | June 7, 1920 | 30 |
| T 186 | Instantaneous values of current and voltage in the battery circuit of automobiles | May 2, 1921 | Out of Print |

| <u>Designation</u> | | <u>Date of Issue</u> | <u>Price (cents)</u> |
|--------------------|--|----------------------|--------------------------|
| T 225 | Determination of the rate of sulphation of storage battery plates | Dec. 19, 1922 | 5 |
| S 434 | Electromotive force of cells at low temperatures | Apr. 17, 1922 | 5 |
| T 271 | Electrical resistance and mechanical strength of storage battery separators. | Jan. 9, 1925 | 10 |

(c) Rectifiers

| | | | |
|-------|--------------------------------------|--------------|----|
| T 265 | Theory and performance of rectifiers | Oct. 9, 1924 | 30 |
|-------|--------------------------------------|--------------|----|

(d) Standard Cells and Potential Measurements

| | | | |
|-------|--|----------------|--------------|
| S 67 | Preliminary specifications for Clark and Weston Cells (Bulletin Bur. Stds. Vol. 3, page 623) | Aug. 16, 1907 | Out of print |
| S 70 | Clark and Weston standard cells (Bulletin, Bur. of Stds. Vol. 4, page 1). | Sept. 17, 1907 | Out of print |
| S 71 | Electrode equilibrium of the standard cell. (Bulletin, Bur. of Stds. Vol. 4, page 81). | Oct. 4, 1907 | Out of print |
| S 104 | Temperature formula of the Weston standard cell (Bulletin Bur. of Stds. Vol. 5, page 309). | Sept. 3, 1908 | Out of print |
| C 29 | Announcement of a change in the value of the international volt. | Dec. 31, 1910 | Out of print |
| S 390 | Two common failures of the Clark standard cell | July 21, 1920 | 5 |
| S 504 | Method of studying electrode potentials and polarization | Apr. 17, 1925 | 15 |

REFERENCES TO BOOKS ON BATTERY SUBJECTS

The Bureau of Standards receives frequent inquiries regarding manufacturing processes and for other information which is not specifically covered in its publications. To meet the needs of such inquirers a very brief list of recent books relating to primary batteries and storage batteries is given below with a brief statement of the scope of the book and the name of the author and publisher.

(a) Primary Batteries

Primary Batteries, by W. R. Cooper, second edition 1917.
D. Van Nostrand Co., 25 Park Place, New York City.
Theory, construction and use of the various forms
of primary batteries.

(b) Storage Batteries

Storage Batteries, by G. W. Vinal, 1924. John Wiley & Sons,
Inc., 440 Fourth Avenue, New York City.
Describes manufacturing processes, properties of
the electrolyte, theory of reactions, operating
characteristics and testing. Uses for storage
batteries are discussed.

Elements of Storage Batteries, by C.M.Jansky and H.P.Wood,
1923. McGraw-Hill Book Co.Inc., 370 Seventh Ave.,
New York City.
Elementary discussion of storage batteries includ-
ing care, maintenance, repair, and applications of
batteries.

Battery Service Work (Volume III of Automotive Repair) by
J. C. Wright, 1923. John Wiley & Sons, Inc., 440
Fourth Avenue, New York City.
Analyzes eighteen repair jobs and discusses ele-
mentary principles of electricity and the behavior
of storage batteries including farm lighting plants.

The Automobile Storage Battery, by O. A. Witte, 3rd edition,
1922. American Bureau of Engineering, Inc.,
Chicago, Illinois. A book for the repairman describ-
ing care and repair of batteries, shop equipment and
business methods. Refers also to radio and farm
lighting batteries.

